

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022077**Date Inspected:** 01-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 13AW

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3013AH-021 [K Plate (KP) 3010A to Floor Beam (FB) 3184A, CJP weld at panel point (PP) 118.65]. The welder is identified as 201583 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3013AH-083 [K Plate (KP) 3012A to Side Plate (SP) 3101A, CJP weld in between panel points (PP) 118.65 to 119]. The welder is identified as 037748 and was observed welding in the 2G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3013AH-082 [K Plate (KP) 3010A to Side Plate (SP) 3102A, CJP weld in between panel points (PP) 118 to 118.35]. The welder is identified as 045143 and was observed welding in the 2G position. ZPMC QC was identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

OBG Seg 13BW

Repair welding of weld joint no: SEG3014S-052 [Side Plate (SP) 3106A to Vertical Plate (VP) 3013A, complete joint penetration (CJP) weld in between panel points (PP) 121 to 121.5]. The welder is identified as 045204 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Wang Xiang Pin. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-2G(2F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-CWR 2625 Rev-0.

OBG Segment 14W

Repair welding of weld joint no: SEG3020V-075 [Floor Beam (FB) 3316A to Longitudinal Diaphragm (LD) 3049A, complete joint penetration (CJP) weld at panel point (PP) 125]. The welder is identified as 066038 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-23(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-CWR 2622 Rev-0.

Repair welding of weld joint no: SEG3020W-036 [Floor Beam (FB) 3316A to Longitudinal Diaphragm (LD) 3048A, complete joint penetration (CJP) weld at panel point (PP) 125]. The welder is identified as 047864 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-23(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-CWR 2623 Rev-0.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020D-052 [Floor Beam (FB) 3343A to Bottom Plate (BP) 3092A, CJP weld at panel point (PP) 128.3]. The welder is identified as 202122 and was observed welding in the 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AY-045 [Stiffener of Side Plate (SP) 3133A to Floor Beam (FB) 3336A, CJP weld at panel point (PP) 128]. The welder is identified as 045276 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020E-056 [Floor Beam (FB) 3343A to Bottom Plate (BP) 3093A, CJP weld at panel point (PP) 128.3]. The welder is identified as 047866 and was observed welding in the 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AL-012 [Floor Beam (FB) 3321A to Side Plate (SP) 3142C, CJP weld at panel point (PP) 126]. The welder is identified as 067942 and was observed welding in the 4G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AL-011 [Floor Beam (FB) 3321A to Side Plate (SP) 3142B, CJP weld at panel point (PP) 126]. The welder is identified as 045246 and was observed welding in the 4G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

During random in process inspection of Orthotropic Box Girder (OBG) member identified as web plate of Floor Beam (FB) 3330A, this QA observed an arc strike on Piece Mark (PCMK) identified as FB 3330 at Panel point (PP) 127.5. This QA marked the affected area and informed ZPMC Quality Control (QC) identified as Mr. Zhu Lin of this issue. Mr. Zhu Lin informed this QA that the arc strike would be corrected in a manner compliant with the contract documents. Attached photograph provide additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
